

CLAIM AMENDMENTS

1. (currently amended): A biodegradable multi-block copolymer, comprising randomly arranged hydrolysable segments each composed of pre-polymer A or pre-polymer B, which segments are randomly connected to each other by multi-functional chain extenders, [[and]] wherein the multi-block copolymer is completely amorphous at human body conditions, and wherein the multi-block copolymer is loaded with a bioactive agent.

2. (previously presented): A copolymer of claim 1, which has a glass transition temperature below body temperature at human body conditions.

3. (previously presented): A copolymer of claim 1, wherein pre-polymer A and/or pre-polymer-B contain ester and/or carbonate and/or anhydride linkages, optionally in combination with polyethers.

4. (previously presented): A copolymer of claim 1, wherein pre-polymer A comprises polyether groups.

5. (previously presented): A copolymer of claim 1, wherein a polyether is present as an additional pre-polymer.

6. (previously presented): A copolymer of claim 1, wherein pre-polymer A comprises a reaction product of an ester forming monomer selected from the group consisting of diols, dicarboxylic acids and hydroxycarboxylic acids.

7. (previously presented): A copolymer of claim 1, wherein pre-polymer A comprises reaction products of at least one cyclic monomer with at least one non-cyclic initiator selected from the group consisting of diols, dicarboxylic acids and hydroxycarboxylic acids.

8. (previously presented): A copolymer of claim 7, wherein said cyclic monomer is selected from the group consisting of glycolide, lactide (L, D or DL), ϵ -caprolactone,

δ -valerolactone, trimethylene carbonate, tetramethylene carbonate, 1,4-dioxane-2-one (*para*-dioxanone), 1,5-dioxepane-2-one and cyclic anhydrides.

9. (previously presented): A copolymer of claim 8 wherein pre-polymer A contains at least two different cyclic monomers.

10. (previously presented): A copolymer of claim 9 wherein pre-polymer A consists of glycolide and ϵ -caprolactone in a 1:1 weight ratio.

11. (previously presented): A copolymer of claim 9 wherein pre-polymer A consists of glycolide and lactide in a 1:1 weight ratio.

12. (previously presented): A copolymer of claim 7, wherein said non-cyclic initiator is selected from the group of succinic acid, glutaric acid, adipic acid, sebacic acid, lactic acid, glycolic acid, hydroxybutyric acid, ethylene glycol, diethylene glycol, 1,4-butanediol and 1,6-hexanediol.

13. (previously presented): A copolymer of claim 4, wherein said polyether groups are selected from the group consisting of PEG (polyethylene glycol), PEG-PPG (polypropylene glycol), PTMG (polytetramethylene ether glycol) and combinations thereof.

14. (previously presented): A copolymer of claim 13, wherein the polyether group is PEG.

15. (previously presented): A copolymer of claim 14, wherein PEG is an initiator for ring-opening polymerization with a molecular weight between 150-4000.

16. (previously presented): A copolymer of claim 1, wherein pre-polymer A has a number average molecular weight (M_n) between 300 and 30000.

17. (previously presented): A copolymer of claim 1, wherein pre-polymer B comprises ϵ -caprolactone, δ -valerolactone, trimethylene carbonate, para-dioxanone, DL-lactide and/or glycolide.

18. (previously presented): A copolymer of claim 17, wherein pre-polymer B contains d,l-lactide.

19. (previously presented): A copolymer of claim 17, wherein pre-polymer B has a number average molecular weight (Mn) higher than 300.

20. (previously presented): A copolymer of claim 16, wherein pre-polymer B is present in an amount of 10-90 wt.%.

21. (previously presented): A copolymer of claim 1, having an intrinsic viscosity of at least 0.1 dl/g, and less than 6 dl/g.

22. (previously presented): A copolymer of claim 1, wherein the chain extender is derived from a difunctional aliphatic compound.

23. (previously presented): A copolymer of claim 22, wherein the chain-extender is a diisocyanate.

24-41. (canceled)

42. (new): The copolymer of claim 1 wherein the bioactive agent is selected from the group consisting of amino acids, (poly)peptides, proteins, nucleic acids, polysaccharides, steroids, growth factors, antigens, chemotherapeutic agents, hormones, antibiotics, antivirals, antifungals, immunosuppressants, antihistamines, anticoagulants, antiphot-photo-aging agents, melanotropic peptides, anti-inflammatory compounds, antipsychotics, radiation absorbers, decongestants, neuroactive agents, anesthetics, sedatives and vitamins.